Rejection under 35 U.S.C. § 103(a)

The Examiner rejects claims 1-5 as obvious over Aoki et al. in view of Kohler. Applicants traverse the rejection and respectfully request the withdrawal thereof.

The Examiner finds that Aoki et al. discloses an enzyme immunoassay detection method for determining the presence of medullasin protease in peripheral blood that is similar to the instant invention. However, the Examiner acknowledges that Aoki does not disclose a medullasin monoclonal antibody. Thus, the Examiner relies on Kohler for teaching the production of monoclonal antibodies.

Applicants submit the not only does Aoki fail to disclose the use of a monoclonal antibody that specifically recognizes medullasin, but Kohler fails to disclose the production of a monoclonal antibody against the human medullasin. In fact, Applicants submit that Kohler and Aoki have absolutely nothing in common regarding their teachings and disclosure.

Aoki discloses an enzyme immunoassay method for the determination of medullasin in peripheral blood, in which beads coated with IgG obtained from immunized rabbits are incubated with medullasin, Fab'-peroxidase conjugate is added and peroxidase

activity binding to the beads is measured by a fluorophotometer. Aoki does not disclose or suggest the use of a monoclonal antibody that specifically recognizes medullasin.

Kohler discloses a method for producing monoclonal antibody using hybridoma, which by the way is a general method of producing monoclonal antibody. Kohler does not disclose producing monoclonal antibody against human medullasin. Moreover, Aoki is silent on the use of hybridomas for production of monoclonal antibodies against human medullasin.

Also, as the references are so unrelated, one of ordinary skill in the art of the present invention would not look to this disclosure to come up with the present invention. Aoki is concerned with accuracy of the enzyme immunoassay in measuring granular medullasin content. Kohler, on the other hand, is concerned with the use of hybridomas of antibody producing cell and myeloma cell for production of monoclonal antibody. Neither reference even hints at producing a monoclonal antibody, which specifically recognizes the human medullasin.

Lastly Applicants submit that polyclonal antibodies are very different from monoclonal antibodies. A polyclonal antibody comprises two or more antibodies and reacts with two or more

antigenic determinants of an antigen. On the other hand, a monoclonal antibody comprises one type of antibody and reacts with one antigenic determinant of an antigen. As such, the monoclonal antibody has a stronger specificity to an antigen as compared to a polyclonal antibody.

For the foregoing reasons, Applicants submit that one of ordinary skill in the art would not be motivated to combine Kohler and Aoki to arrive at the present invention. As such, the rejection should be withdrawn and the claims allow.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of three (3) months to March 13, 2002 in which to file a reply to the Office Action. The required fee of $920.00 is enclosed herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By _____ #32,868
for Gerald M. Murphy, Jr., #28,977

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

GMM/RJR/bsh